SBR No. 49/17-18
DATED 29/6/2012

Original/Duplicate/Triplicate

EE/ELE/Y/BR No. 49/17-18

CONTRACT CERTIFICATE

(For Other Works)

Date.....2010 or 29-6-17

No. 1st & Final Bill

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....
Sub Divisional **Job Code :-002-17-000012**

Schedule Docket No. Head of Account : P 3142

D.R.No. :

Name of Work : Providing LED Street Lights in Ward no 02 Yelahanka Sub division as a Pilot Project.

Name of Contractor and Full Address:**Technical Maneger-2, KRIDL,**

Reference to Agreement No:EE/Ele/YZ/WO/11 /17-18 Date:04-05-2017

Certified that the measurements were taken by me on 29/6/17 and recorded of Pages 311/432 to 445 of measurement Book No. 3115/17-18 and that the work is satisfactorily executed.

T.N. Baddy

Officer-in-charge of work

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Certified that the measurement were taken by me on 29/6/17 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub Division Officer

Asst. Executive Engineer (Elec.)
Yelahanka Sub-Division
Bruhat Bangalore Mahanagara Palike

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Bill =	24.98.025=00
2) Deduct amount to be held in reserve being .....percent Rs.....	IT 2%	49.961=00
3) " Balance	VAT4%	99.921=00
4) Deduct Payment:	Amount	
a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... adjusted towards cash advance recovery of	Swc 1%	24.980=00
	FSD 7.5%	1,87.352=00
b) Payments Now made } cost store or other material supplied. recovery of amount creditable to this/other work. Amount paid on this bill Cheque / Cash.	CBFD 1%	2498=00
	deductions	3,64,712=00
	Cheque =	21.33.313=00
5) Balance being unpaid value of work done held in reserve.		
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.		
7) Net amount due to or from Contractor unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		
Total amount adjusted -		

Assistant Executive Engineer
Byatarayanapura Sub-division
KRIDL, BBMP, Bangalore

Received Rs..... (in words).....
.....
by cash and by adjustment of Payment as per memorandum
(in final settlement of all demands)

(For use in the Office)

Witness
1.
2.

Dated Signature of Contractor

Paid by me by Cheque No. Dated.....
Cash Rs.....
Dated.....
Initials of Officer making payment

Stamp

ಲೆಕ್ಕಶೀರ್ಷಿಕೆ P3142 LED pilot Project.
ರೂ:24,98,025/- ಮಾಡಿ ಪ್ರಾಂಶುಪಾಲ
ರೂ:21,33,313=00 ನೀಡಬಹುದಾಗಿದೆ
ರೂ:3,64,712=00 ಜಾಮೀನಿಗೆ ಬಾಕಿ

Executive Engineer
ಲೆಕ್ಕ ಅಧಿಕಾರಿಯವರು
ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl no	Description of item
	Name of Work : Providing LED Street Lights in Ward no 02 Yelahanka Sub division as a Pilot Project.
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts. make :- Philips,Bajaj,havelsInovalite,Surya
2	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe
3	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.
4	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I Class 'A' PVC Cable. 4 core 16 sqmm
5	Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench Gl pipe / stoneware pipe / on wall /on pole as required. 1. In existing trench/duct.b)25sqmm to 75 sqmm
6	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).
7	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM. A)1.1 KV Pin Insulator
8	No. 8 Strain Insulator
9	Supplying and Fixing ..... including all Hardware's etc. complete as per the standard technical specification of BESCOM. RCC Clamp
10	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm -510mm

Previous		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate	Amount	Qty	Cost	
		98	18720.00	1834560.00	98	1834560.00	
		98	893.00	87514.00	98	87514.00	
		300	7.50	2250.00	300	2250.00	
		79	140.40	11091.60	79	11091.60	
		79	16.00	1264.00	79	1264.00	
		2487	30.00	74610.00	2487	74610.00	
		54	44.00	2376.00	54	2376.00	
		30	14.00	420.00	30	420.00	
		45	84.00	3780.00	45	3780.00	
		45	306.00	13770.00	45	13770.00	

11	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.f)40-63Amps TPN, Group A5-32Amps SP	Ea
12	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Ea
13	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	Pe
14	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	Sq
15	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	Per
16	Fixing halogen/ metal hallide /SVL/IL/LED flood light fittings over existing pole/ wall ceiling including clamps bolts nuts and wiring using sitable capacity wires	Ea
17	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300mmx450mmx214mm	N
18	Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	N
	Total Rs	
	Add KRIDL Charges 9.1%	
	Grand Total Rs	

Certificate: 1. Certify that theThe Above said Work has been carreidout satisfactorily

Asst. Executive Engineer
Yelahanka Sub-Divn.
Bruhat Bangalore Mahanagara Palike

		20	418.00	8360.00	20	8360.00	
		10	9915.00	99150.00	10	99150.00	
		10	132.00	1320.00	10	1320.00	
		13500	0.22	2970.00	13500	2970.00	
		10	263.00	2630.00	10	2630.00	
		75	176.00	13200.00	75	13200.00	
		10	5826	58260.00	10	58260.00	
		10	7214	72140.00	10	72140.00	
				2289665.60		2289665.60	
			208360	208359.57		208359.57	208360.
				2498025.17		2498025.17	

2498025.60. 2498,025:60